



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/522,286	01/25/2005	Bastiaan Johannes De Wit	NL 020690	1497

24737 7590 05/20/2009
PHILIPS INTELLECTUAL PROPERTY & STANDARDS
P.O. BOX 3001
BRIARCLIFF MANOR, NY 10510

EXAMINER

DEFRANK, JOSEPH S

ART UNIT	PAPER NUMBER
----------	--------------

3724

MAIL DATE	DELIVERY MODE
-----------	---------------

05/20/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/522,286	Applicant(s) DE WIT ET AL.	
	Examiner JOSEPH DEFRANK	Art Unit 3724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 March 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4,6,7,11,12 and 14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4,6,7,11,12 and 14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/4/09 has been entered.

Claim Rejections - 35 USC § 102

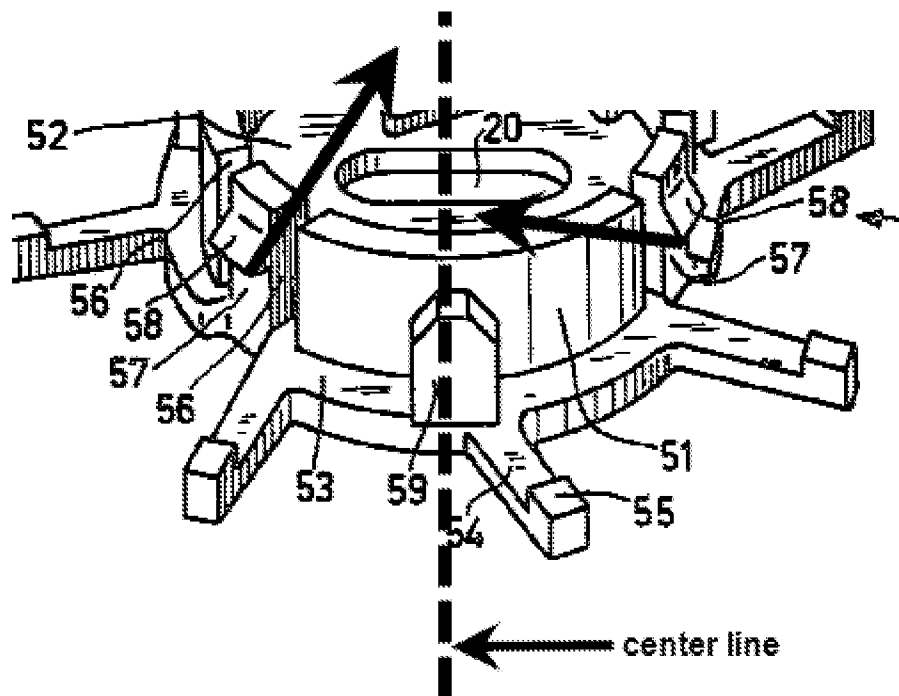
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1, 3, 11, 12, and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by de Vries et al. (US 4,343,086; as previously cited; hereafter de Vries).

4. With respect to claims 1 and 11, de Vries discloses a shaving apparatus with a housing (1) and at least one cutting unit (5, three of them) which can be pivotably and resiliently pressed in with respect to the housing (see column 2 lines 32-36), said cutting unit comprising an outer cutter (3) and an inner cutter (34) that can be driven into rotation with respect to the former, said inner cutter being provided with cutting elements (39) with cutting edges, while said outer cutter is provided with hair trap openings (4) bounded by cutting edges for cooperating with the cutting edges of the cutters for the cutting of hairs, wherein during cutting of a hair a cutting force is exerted by the hair on the inner cutter, and a plane through the totality of cutting edges defines a

Art Unit: 3724

cutting plane, said shaving apparatus being further provided with a drive device (motor 10) having a drive shaft (6) for driving the inner cutter, which drive device during cutting of a hair exerts a drive force on the inner cutter (a force is needed to turn the cutter), while the drive shaft exerts a pre-stress force in the direction of the outer cutter (from spring 16), wherein the drive device comprises only one coupling member (37) that can be driven into rotation and that is provided with at least one driving surface (59, 51), the drive shaft is axially supported on the outer cutter by means of the coupling member for directly driving the coupling member into the rotation (through hole 20 and projection 19), the inner cutter is provided with at least one driven surface (formed by notch 41 and hole 40) cooperating with the driving surface for exerting the driving force on the cutter, the direction of said driving force being substantially perpendicular to the driving surface and the driven surface, and snap hooks (58) are provided for fastening the coupling member to the inner cutter, wherein the snap hooks have hook portions pointed toward a center of the coupling member (see copied figure below with arrows added for clarity) and hook onto the coupling bush located around a center of the inner cutter, the coupling bush extending away from a carrier for the cutting elements.



The above drawing shows two different ways with which the hooks can be interpreted to having a hook portion which points towards the center of the coupling member. Further, with respect to the coupling bush extending in a particular way, examiner notes that any three dimensional object can be viewed as extending in almost any direction. The coupling bush of de Vries not only has a thickness (thus it can be viewed as extending away from the cutters in a vertical direction) it also has a width, both extend away from the carriers of the cutting elements.

5. With respect to claim 12, de Vries discloses the shaving apparatus wherein the coupling member has a profiled cavity (20) for receiving a coupling head (19) of the drive shaft (6) so that the coupling member is directly driven into rotation by the drive shaft.

Art Unit: 3724

6. With respect to claims 3 and 14, de Vries discloses the shaving apparatus wherein the driving surface of the coupling member and the driven surface of the inner cutter have mutually corresponding helical shapes. The two meshing surfaces are round in shape and correspond to each other.

Claim Rejections - 35 USC § 103

7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

8. Claims 2, 4, 6, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over de Vries in view of Lorenz (US 2,472,853).

9. With respect to claims 2, 4, 6, and 7, de Vries discloses the shaving apparatus wherein the inner cutter has a carrier (38) for the cutting elements, the carrier being provided with the driven surfaces (see figure 4) the coupling member is coupled to said carrier, the carrier being movable in axial direction with respect to the coupling member, while said coupling member can be coupled to the drive shaft and is provided with the driving surfaces. However, de Vries does not disclose means for obtaining a small contact pressure between the cutters being present, those means being present between the carrier and the coupling member, the means formed by centrifugal elements which are enclosed between a pressure surface of the carrier and a surface of the coupling member that is directed radially outwards and obliquely towards the carrier, nor the coupling member being provided with a cam and the pressure surface of the carrier is directed obliquely towards the coupling member viewed in a direction opposed to the drive direction such that the centrifugal elements lie enclosed between said cam

Art Unit: 3724

and the sloping pressure surface. Examiner notes that it is well known in the art to provide means for maintaining a small contact pressure between the blades during operation of the razor.

Lorenz discloses a shaving apparatus having a system for maintaining a small contact pressure between the blades during operation that has all the claimed features. Lorenz discloses centrifugal elements (balls 26') being supported on a coupling plate and beneath the bottom (pressure surface) of the carrier wherein the coupling plate having cam surface (30') with the same alignment as claimed with respect to the pressure surface (see figures 3 and 4). The setup using the centrifugal elements and cam surface is designed to ensure pressure between the blades during operation (column 1 lines 19-34). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the apparatus of de Vries to include centrifugal elements between the coupling member and inner cutter (and all of the associated structure such as the cam surfaces and pressure surface) in order to maintain pressure between the blades during operation in view of the teachings of Lorenz.

Response to Arguments

10. Applicant's arguments filed with respect to claims 1 and 11 have been fully considered but they are not persuasive. Applicant argues that the snap hooks of de Vries point away from the center of the coupling member. Examiner respectfully disagrees. It is noted that under the new claim amendments, the snap hooks do not need to point toward the center of the coupling member, but just a portion of the snap

Art Unit: 3724

hook has to point in that direction. The addition of the limitation "snap hooks have hook portions pointed toward the center" opens the limitation up to a broader interpretation.

There are at least two parts of each snap hook of de Vries that can be viewed as pointing towards the center of the coupling member. They are pointed out in detail in the figure which is annotated in this action.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOSEPH DEFRANK whose telephone number is (571)270-3512. The examiner can normally be reached on Monday - Thursday; 9am-6pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer Ashley can be reached on (571) 272-4502. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3724

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jason Daniel Prone/
Primary Examiner, Art Unit 3724

Joseph De Frank
Examiner
Art Unit 3724

JD
5/18/09
/J. D./
Examiner, Art Unit 3724